→ USPTO

Remarks

Claim 1 is further amended in this further Amendment removing "and for" and replacing hit with "at least one of." As these claims have not yet been reviewed and entered, all other changes made in the claims with the original Amendment in response to the Office Action mailed July 1, 2004, submitted by First Class Mail September 17, 2004, remain.

Claim 1 is amended to combine original claims 1, 3, 4 and 5 and should be allowable, as indicated in the Office Action.

Claim 2 depends on allowable claim 1.

Claims 3 and 4 are amended to depend on allowable claim 1.

A new independent claim 8 is added.

New claim 8 is based on original claim 1 too and contains the additional feature that the burner arrangement and/or the heat exchanger arrangement can be connected to the fuel cell system for introducing the exhaust gases of the burner arrangement into the fuel cell system. New claim 8 refers to the embodiment shown in figure 4 of the present application. In this figure 34 you can see that the exhaust gases of the burner 14 can be fed to the fuel cell system 60 directly (via a line represented by a broken line) or via the heat exchanger 16 and the valve arrangement 66. New claim 8 will be used in the parallel German examination and possibly in the parallel European examination. The prior art cited in the Office Action does not anticipate such a system. First, this prior art does not disclose the feature that the burner arrangement is selectively connectable to the reformer arrangement. Second, the cited prior art does not disclose the feature that the fuel cell system can be provided with the exhaust gases of the burner arrangement. In this context we further would like to point out that the statement in the Office Action that the patent to Ohga (US 5,316,870) anticipates the subject matter as defined in

original claim 1 is not correct. It can clearly be seen that the hydrogen generated in the reformer 7 of this document is fed to the fuel cell system 1 via a line 11. However, there is no connection between the reformer 7 and the burner 28. Therefore this document does not disclose the feature that the burner arrangement is provided for reception of hydrogen produced in the reformer arrangement.

Further, in this set of claims, we amended the portion contained in original claim 4. We believe that there is a misunderstanding insofar as the "exhaust-gas after-treatment system" is concerned. This exhaust-gas after-treatment system is associated to the internal combustion engine exclusively. There is no interaction between this exhaust-gas after-treatment system and the fuel cell system. Instead the exhaust-gas after-treatment system for the internal combustion engine on the one hand and the fuel cell system on the other hand are the two possibilities of a further hydrogen consuming system. In this context reference is made to Applicant's specification, page 3 where the corresponding and correct formulation is used in the first two

Further, in the claims the expression, "fuel cell system" has been used instead of the expression "fuel cell," as the fuel cell only is a part of the fuel cell system. You can see from figure 4 as originally filed that this fuel cell system additionally contains the gas-cleaning system 62 arranged upstream of the fuel cell 64.

In an IDS, we are disclosing additional prior art documents D7 to D10 which have been cited in a further Official Communication of the German Patent and Trademark Office. Some of these prior art documents already are known in the present case. Document D8 (EP 1 234 697 A1) already has been cited in the European search report as a prior art document which was communicated with our letter of April 02, 2004. Document D9 (DE 199 13 794 A1) is the German counter part to US Patent 6,276,473 B1, which is listed in the Notice of References Cited (PTO-892) in the Office Action. With respect to the other two additional prior art documents D7 and D10 we carried out family searches in order to find some corresponding English language documents. With respect to D7 (DE 100 13 597 A1) we found an international laid-open publication

ኢ.

.

WO 01/71838 A2 containing an English language abstract. From this abstract you can see that this prior art document too does not disclose a system in which the hydrogen generated in the reformer 4 may be supplied to the burner 6. Instead all the hydrogen generated in the reformer 4 is fed to the fuel cell 16 via line 14. With respect to D10 (DE 44 46 841 A1) we found a corresponding international publication WO 96/20506 containing an English language abstract as well as EP 0 807 321 B1 containing an English language set of claims. With respect to this prior art document, Figure 3 shows a system in which a catalytic burner 5 is provided with the anode exhaust gases which, as is the case with the above-referenced US Patents, of course can contain unburnt hydrogen. However, there is no connection between the burner 5 and the reformer generating the hydrogen for the fuel cell.

Wherefore, please consider and allow the claims in this application as currently amended.

Respectfully submitted, M. Robert Kes ten boson

M. Robert Kestenbaum

Reg. No. 20,430

11011 Bermuda Dunes NE

Albuquerque, NM USA 87111

Telephone (505) 323-0771 Facsimile (505) 323-0865

I hereby certify this correspondence is being submitted to Commissioner for Patents, Washington, D.C. 20231 by facsimile transmission on October 4, 2004, fax number (703) 872-MI Robert Kistenberr 9306.

M. Robert Kestenbaum